

U.S. Patent Application Serial No. 10/807,516
Amendment filed March 29, 2006
Reply to OA dated January 5, 2006

REMARKS

Claim 1 has been amended, and claim 6 has been added in order to more particularly point out, and distinctly claim the subject matter to which the applicant regards as his invention. The applicant respectfully submits that no new matter has been added. It is believed that this Amendment is fully responsive to the Office Action dated January 5, 2006.

Claims 1 - 6 are currently pending in this patent application, claim 1, 3, 5 and 6 being independent claims, and claim 6 being an added claim.

The applicant thanks the Examiner for indicating (in item 10, page 5 of the outstanding Action) that claim 5 has been allowed, and for also indicating that claim 2 would be allowable if rewritten in the manner suggested in the first full paragraph on page 5 of the outstanding Office Action.

However, the Examiner maintains her reliance on Nowak (U.S. Patent No. 5,580,188) in rejecting claim 1 under 35 §102(b) as being anticipated by Nowak. The applicant respectfully requests reconsideration of this rejection.

The applicant's claimed invention, as now set forth in independent claim 1, is directed to a reamer apparatus for a ground boring machine. The claimed reamer apparatus includes a substantially hollow conical reamer main body which diameter reduces towards a drawing side; a rod connecting portion provided at a narrow diameter end portion of the reamer main body for connecting with a rod; and a coupling structure provided on an opposite side of the rod connecting portion. As now further recited in independent claim 1, the coupling structure has a swivel joint that allows rotation of the reamer main body with respect to a buried pipe, and a main portion of the swivel joint is substantially accumulated and extends within the reamer main body.

A significant structural arrangement of the applicant's claimed invention, as now set forth in independent claim 1, includes the claimed main portion of the swivel joint being substantially accumulated and extending within the reamer main body.

The Examiner, without specifically citing where in the portion in Nowak she relies on, has taken the position that in Nowak, "a main portion of the swivel joint is substantially accumulated in the reamer main body."^{1/}

^{1/} See, lines 9 and 10, item 6, page 3 of the outstanding Action.

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As argued however in the Remarks portion of the applicant's October 20, 2005 Amendment, Nowak's swivel joint 48 is clearly entirely outside a hollow portion of the main body 45, which ends at its left end indicated by the noted vertical line.^{2/}

Moreover, the Examiner's comments in lines 4 - 7, item 1, page 2 of the outstanding Action, merely refer to the differences in the manner in which reference number "48" (either the upper or the lower one, the lower reference number 48 referring to "a pulverized debris 48") is used. Such Examiner's comments however do not appear relevant to the applicant's position that Nowak does not teach the claimed structural arrangement in which the claimed swivel joint is substantially accumulated within the reamer main body.

In order to highlight the above-discussed distinguishable structural arrangement of the applicant's claimed invention over the teachings of Nowak, the applicant has amended independent claim 1 in order to more particularly recite that the claimed main portion of the swivel joint is substantially accumulated "and extends within the reamer main body." That is, as clearly shown in Nowak's Figure 2, the upper reference number "48" specifically refers to Nowak's "swivel connecting means 48," while reference number "55" specifically refers to "channel 55" and not to a reamer. Thus, the applicant maintains his position that Nowak's "swivel connecting means 48" is not within a reamer main body contrary to the applicant's claimed

^{2/} See, lines 9-11, page 8 of the October 20, 2005 Amendment.

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reamer apparatus, as now set forth in claim 1.

In view of the above, the applicant submits that not all of the claimed elements, as now recited in independent claim 1, are found in exactly the same situation and united in the same way to perform the identical function in Nowak's apparatus. Thus, there can be no anticipation of the applicant's claimed invention, as now recited in independent claim 1, under 35 §102(b) based on the teachings of Nowak.

Accordingly, the withdrawal of the outstanding anticipation rejection under 35 §102(b) based on Nowak is in order, and is therefore respectfully solicited.

Furthermore, with respect to the Examiner's reliance on a new reference (namely, Jenny (U.S. Patent No. 6,098,708)) in rejecting claims 3 and 4 under 35 USC §103(a) based on Nowak in view of Jenny, in item 3, page 2 of the outstanding Action, the Examiner has acknowledged that her previously relied upon combination of references did not meet the applicant's claimed invention.

It is the applicant's position that the Examiner's current reliance on the Nowak and Jenny combination of references also does not teach the applicant's claimed cover that "encompass an outer peripheral side of the coupling structure," as clearly set forth in claim 3. That is, Jenny's cylindrical tubular shaft 18 does not cover a so-called "splitting wedge adapter 22." Jenny's splitting wedge adapter 22 may act as a coupling structure; thus, it is clear that absent any extension from shaft 18 covering the wedge

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adapter 22, there is an increased chance of sediment invasion on the wedge adapter 22.

Jenny's splitting wedge adapter 22 may act as a coupling structure and that Jenny's cylindrical shaft 18 does not extend to cover such adapter 22; thus, Jenny's teachings, even if *arguendo* combined with the teachings of Nowak, would still fall far short in fully meeting the applicant's claimed cover, as set forth in independent claim 3.

In view of the above, a person of ordinary skill in the art would not have found the applicant's claimed invention, as now set forth in independent claim 3 (and claim 4 which depends therefrom), obvious under 35 USC §103(a) based on Nowak in view of Jenny. Accordingly, the withdrawal of the outstanding obviousness rejection under 35 USC §103(a) based on Nowak in view of Jenny is in order, and is therefore respectfully solicited.

In view of the aforementioned amendments and accompanying remarks, claims, as amended, are in condition for allowance, which action, at an early date, is requested.

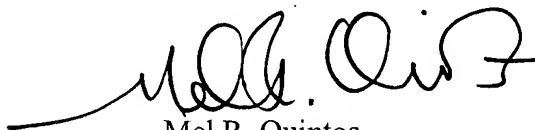
If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact the applicant's undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

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In the event that this paper is not timely filed, the applicant respectfully petitions for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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